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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER
GREY, CHRISTOPHER P

ART UNIT	PAPER NUMBER
2667	

DATE MAILED: 09/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO 90C (Rev 10/03)

	Application No.	Applicant(s)
Office Action Summary	09/806,484	ARWALD ET AL.
	Examiner	Art Unit	
	Christopher P. Grey	2667	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>08 June 2005</u>.

2a)☒ This action is **FINAL.**   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-36</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-36</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☒ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

Response to Amendment

1.   Responsive to the amendments received on June 8, 2005, claims 1-19 and 21-

27 have been entered as requested.

New claims 28-36 have been entered as requested.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2.   Claims 1-28, 31 and 34 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Danielson et al. (US 5239662) in view of Mendelson (US 6343083) in

further view of Sylvian et al. (WO 98/37724)

Claim 1, 7   Danielson et al. (Danielson 'hereinafter ') discloses within a

communication system, a controller (device) configured to establish communication

between different/non-compatible locations/networks (elements 34-37 and 31-1-N in fig

3). Danielson discloses these locations/networks using different communication

protocols. Danielson discloses devices (elements 21 a-n in fig 2) being coupled to the

controller via adapters (elements 22a-n in fig 4), which convert (translate) the received

protocol to a common protocol (Col lines 22-68). Danielson does not disclose a protocol

coordination mechanism that compares attributes of different protocols supported by a

first adapter and a second adapter when establishing the communication session

between the first object and second object. Danielson does not disclose a database

having a list of subscribers with associated calling numbers.

Mendelson discloses an invention designed at establishing a connection across a

connection- oriented network. Mendelson also discloses an access network controller

containing a cache of tables containing IP to MAC translation addresses and other

parameters (Col 12 lines 26-59) pertaining to the networks (elements 112 and 110 in

Fig 1). The access network controller compares the parameters within the cache in

order to translate the specified destination IP address to a corresponding destination

address (Col 13 lines 12-15). Mendelson also discloses an Ethernet, ATM and LAN

network (Col 5 lines 25-49). Although one skilled in the art can appreciate the cache of

tables disclosed by Mendelson including a list of subscribers, it is not specifically

disclosed within the specification.

Sylvian et al. (Sylvian 'hereinafter') discloses within a communication system a

plurality of communication networks, each utilizing its own protocol. Furthermore,

Sylvian discloses a database (element 250 in fig 3) that stores subscription data

(disclosed on page 9 lines 7-27).

It would have been obvious to one of the ordinary skill in the art at the time of the

invention to modify the controller disclosed by Danielson with the controller disclosed by

Mendelson, aimed towards comparing parameters in order to translate protocols. The

motivation for the modification of these teachings is to achieve better management of

connections (see abstract). Furthermore, it would have been obvious to one of the

ordinary skill in the art at the time of the invention to modify the teachings of both

Danielson and Mendelson with the subscription and service list/database disclosed by

Sylvian. The motivation for this modification is to provide management of multiple

networks and services in a more efficient manner (disclosed on page 3 lines3-5).

Claim 2, 8   Danielson discloses a central site/controller (element 30 in fig 3) that

communicates with different locations (objects), and routes/switches the information

accordingly (Col 4 line 22-38). The motivation is the same as that for claim 1 and 7.

Claim 3, 9   Danielson discloses several devices being interfaced with the

communication controller (router) via adapters (elements 22 A-N in fig 2). This controller

is designed to control and route (router) information (disclosed in Col 4 lines 53-68).

Danielson does not disclose a database containing a subscriber list and numbers.

Danielson also does not disclose a control signal being sent to establish a protocol to be

employed.

Sylvian discloses a main database containing subscriber information (page 3

lines 8-17 and page 9 lines 7-27). Sylvian also discloses when a new subscriber

attempts to connect to a network, the subscriber accesses the main database, where

information (protocol info) is gathered about the new device and communicated (control

signal) to the affected networks/devices Page 13 line 1-17).

The motivation is the same as that for claim 1 and 7.

Claim 4, 10   Danielson does not disclose the entries within the database being

changed when the subscriber moves from one object affiliation to the other.

Sylvian discloses the maintenance of subscriber data, location and activity

information, and no need for changing calling numbers (Page 8 lines 12-18 and page 16

lines 1-23). The motivation is the same as that for claim 1 and 7.

Claim 5, 11   Danielson does not disclose the entries within the database having

associated calling numbers for a particular subscriber with an object and a net number

for said subscriber.

Sylvian discloses several different assigned numbers for a given subscriber

(page 16 lines 1-23). The motivation is the same as that for claim 1 and 7.

Claim 6, 12   Danielson does not disclose associating one calling number for a

subscriber with a net number and another number at which the subscriber is available.

Sylvian discloses a number of different numbers being assigned to each

subscriber, where the different numbers represent different specifications (net and

availability, page 16 lines 1-23). The motivation is the same as that for claim 1 and 7.

Claim 13, 27   Danielson et al. (Danielson 'hereinafter ') discloses within a

communication system a method comprising a controller (device) configured to

establish communication between different/non-compatible locations/networks

(elements 34-37 and 31-1-N in fig 3). Danielson discloses devices (elements 21 a-n in

fig 2) being coupled to the controller via adapters (elements 22a-n in fig 4), which

convert (translate) the received protocol to a common protocol (Col lines 22-68).

Danielson does not disclose identifying attributes of both objects.

Mendelson discloses an invention designed at establishing a connection across a

connection- oriented network. Mendelson also discloses an access network controller

containing a cache of tables containing IP to MAC translation addresses and other

parameters (Col 12 lines 26-59) pertaining to the networks (elements 112 and 110 in

Fig 1). The access network controller compares the parameters within the cache in

order to translate the specified destination IP address to a corresponding destination

address (Col 13 lines 12-15).

Therefore it would have been obvious to one of the ordinary skill in the art at the

time of the invention to modify the controller disclosed by Danielson with the controller

disclosed by Mendelson, aimed towards comparing parameters in order to translate

protocols. The motivation for the modification of these teachings is to achieve better

management of connections (see abstract).

Claim 14   Danielson discloses converting (translate) a received protocol to a

common protocol (Col lines 22-68). Danielson does not disclose determining whether

an intermediate translating step is required.

Mendelson discloses a controller that makes an initial translation, and

furthermore determines if the destination address is native or not, and translates as

necessary (Col 13 lines 12-15).

The motivation is the same as that for claim 13.

Claim 15   Danielson discloses converting (translate) a received protocol to a

common protocol (Col lines 22-68). Danielson does not disclose the predetermined

protocol being different from the native protocol and another protocol.

Mendelson discloses a controller that makes an initial translation, and furthermore determines if the destination address is native or not, and translates as necessary (Col 13 lines 12-15).

The motivation is the same as that for claim 13.

Claim 16   Danielson discloses devices (elements 21 a-n in fig 2) being coupled to the controller via adapters (elements 22a-n in fig 4), which convert (translate) the received protocol to a common protocol (Col lines 22-68). Furthermore, Mendelson discloses a conversion of protocol exclusively at the adapters (disclosed in Col 8 line 60- Col 9 line 3). The motivation is the same as that for claim 13.

Claim 17   Danielson does not disclose determining whether an activity in the first object requires communication outside of the object and initiating a sending step when the activity takes place outside of the first object.

Sylvian discloses when a subscriber enters a new coverage area (activity), a location update is communicated (sending step) to an HLR (Col 12 lines 10-21).

The motivation to modify the teachings of Danielson and Mendelson with the subscriber profile (HLR) disclosed within Sylvian's invention is to manage and control subscriber information and services.

Claim18   Danielson discloses translating the information into a format that is supported by the second adapter (Col lines 22-68), but not for translating the format into another protocol.

Mendelson discloses an initial translation, and furthermore determines if the destination address is native or not, and translates as necessary (Col 13 lines 12-15).

The motivation is the same as that for claim 13.

Claim 19   Danielson and Mendelson do not teach establishing a profile for future

communication sessions.

Sylvian discloses a subscriber profile (element 310 in Fig 5) for establishing a

connection (page11 line 29- page 12 line 9).

The motivation to modify the teachings of Danielson and Mendelson with the

subscriber profile disclosed within Sylvian's invention is to manage and control

subscriber information and services.

Claim 20   Danielson does not disclose a first object establishing a second object in

which services for future communication will be used.

Sylvian discloses parameters being stored within the subscriber profile including

the type of service, for which the connection between the first device and second device

are determined (page 11 line 29- page 12 line 9). The motivation is the same as that for

claim 19

Claim 21   Danielson discloses a form of protocol coordination mechanism, whereby

a number of step/rules take place in order for communication to take place (disclosed in

Col 5 lines 1-32). The motivation is the same as that for claim 13.

Claim 22   Danielson does not teach a user profile.

Sylvian discloses a subscriber profile (element 310 in Fig 5) for establishing a

connection (page11 line 29- page 12 line 9).

The motivation to modify the teachings of Danielson and Mendelson with the subscriber profile disclosed within Sylvian's invention is to manage and control subscriber information and services.

Claim 23   Danielson discloses a form of protocol coordination mechanism, whereby a number of step/rules take place in order for communication to take place (disclosed in Col 5 lines 1-32). Furthermore, Sylvian discloses a subscriber profile (element310 in fig 5) for authentication and authorization, and another database for updating location. One skilled in the art can appreciate the need for specific rules.

The motivation is the same as that for claim 22

Claim 24   Danielson does not disclose indicating conditions for linking the first object to the second object by considering available factors.

Sylvian discloses a subscriber profile that indicates several different conditions for linking, including preference data such as cost of routing (page 11 lines 29-page 12 line 9).

The motivation to modify the teachings of Danielson and Mendelson with the subscriber profile disclosed within Sylvian's invention is to manage and control subscriber information and services.

Claim 25   Danielson does not disclose registering agreements and conditions that are mutually agreed upon.

Sylvian discloses a subscriber profile that indicates preference data (registering agreement and conditions) for the linking between objects (page 11 lines 29-page 12 line 9). The motivation is the same as that for claim 24.

Claim 26   Danielson discloses the controller (element 20 in fig 2) being accessible to

a number of devices (elements 21 A-N). The motivation is the same as that for claim 13.

Claim 28, 31, 34   Danielson does not specifically teach the protocol coordination

mechanism determining how a particular communication link should be established

between the first object and the second object.

. Mendelson discloses determining how a particular connection between a source

and destination may be established (Col 12 lines 43-59).

3.   Claims 29-30, 32, 33, 35 and 36 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Danielson et al. (US 5239662) in view of Mendelson (US 6343083) in

further view of Sylvian et al. (WO 98/37724) in further view of Sawyer et al. (US

6058115), hereinafter referred to as Sawyer.

Claim 29, 32, 35   The combined teachings of Danielson, Mendelson and Sylvian do

not specifically disclose the protocol coordination mechanism analyzing the candidate

protocols and determining a most effective protocol for establishing a communication

session.

Sawyer discloses establishing a communication session between subscriber

units where each subscriber may be capable of using any of a multiple of protocols (Col

4 lines 10-20). Sawyer discloses a memory for storing a priority list of possible protocols

that may be used to establish communication, and using a task to determine which

protocol is best suited (Col 7 lines 11-30).

It would have been obvious to one of the ordinary skill in the art at the time of the invention to modify the combined teachings of Danielson, Mendelson and Sylvian with the tasks of comparing and selecting a protocol as disclosed by Sawyer. The motivation for this modification is to make possible multiple communication protocols over a communication link (Col 1 lines 35-50).

<u>Claim 30, 33, 36</u>   The combined teachings of Danielson, Mendelson and Sylvian do not specifically disclose when an overlapping language is not available, the protocol coordination mechanism identifying protocols that are within a vocabulary of the first object and the second object and selects the protocol that minimizes a translation burden to a router.

Sawyer discloses identifying protocols that are within a vocabulary of the first object and the second object and selects the protocol that minimizes a translation burden (Col 4 lines 10-20 and Col 4 lines 52-67 and Col 7 lines 11-30).

It would have been obvious to one of the ordinary skill in the art at the time of the invention to modify the combined teachings of Danielson, Mendelson and Sylvian by maintaining the protocol list as disclosed by Sawyer, and furthermore making the comparison to determine a protocol as disclosed by Sawyer. The motivation for this modification is to make possible multiple communication protocols over a communication link (Col 1 lines 35-50).

Response to Arguments

4.   Applicant's arguments filed on June 8, 2005 have been fully considered but they are not persuasive.

The applicant argued that the cited art does not disclose the Applicant's claimed "compares the parameters within the cache".

The examiner maintains that the same limitation, in its **broadest** term is already discussed in the rejection of claim 1, 7, 13 and 27 wherein Mendelson discloses an access network controller containing a cache of tables containing IP to MAC translation addresses and other parameters (Col 12 lines 26-59) pertaining to the networks (elements 1 12 and 110 in Fig 1). Mendelson discloses the table consisting of parameters of a number of protocols supported by a source and destination (Col 12 lines 43-59). It would have been obvious to one of the ordinary skill in the art at the time of the invention that finding a MAC address using an IP address requires some form of comparison in order to find a match, where an IP address is an attribute of a protocol.

Conclusion

5.   **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time

policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the mailing date of this final action.

6.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Christopher P. Grey whose telephone number is

(571)272-3160. The examiner can normally be reached on 6:30-3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Chi Pham can be reached on (571)272-3179. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

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you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

Christopher Grey
Examiner
Art Unit 2667

CHI PHAM
SUPERVISORY PATENT EXAMIN'
TECHNOLOGY CENTER 2??   9/15/05